

No.

200400118



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Texas Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER-PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMERICAL GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BENTGRASS, CREEPING

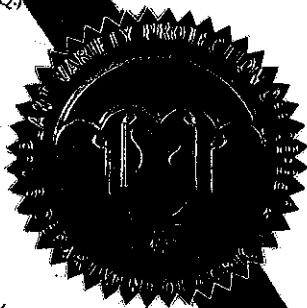
'962'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-fourth day of March, in the year two thousand and five.

Attest:


Commissioner
Plant Variety Protection Office
Agricultural Marketing Service


Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

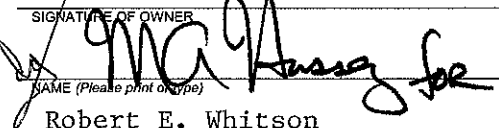
Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Texas Agricultural Experiment Station		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME Syn 96-2, 96-2 Pick Syn 96-2		3. VARIETY NAME 962	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Dr. Robert E. Whitson, Deputy Director Office of the Director, Texas Agricultural Experiment Station 2147 TAMU College Station, TX 77843-2147		5. TELEPHONE (include area code) (979) 845-4747		FOR OFFICIAL USE ONLY PVPO NUMBER 2004 00 118 FILING DATE 2-25-2004	
		6. FAX (include area code) (979) 458-4765			
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) State of Texas Research Agency		8. IF INCORPORATED, GIVE STATE OF INCORPORATION		9. DATE OF INCORPORATION	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Janie Hurley, Technology Licensing Manager, Agriculture/Life Sciences Technology Licensing Office The Texas A&M University System 3369 TAMU College Station, TX 77843-3369				FILING AND EXAMINATION FEES: \$ 3652.00 DATE 2/25/04 CERTIFICATION FEE: \$ 432.00 DATE 3/4/05	
11. TELEPHONE (Include area code) (979) 847-8682		12. FAX (Include area code) (979) 845-1402		13. E-MAIL jhurley@tamu.edu	
14. CROP KIND (Common Name) Creeping Bentgrass		16. FAMILY NAME (Botanical) Gramineae		18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Agrostis stolonifera subsp. palustris		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)				20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input type="checkbox"/> NO (If "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)				24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Robert E. Whitson		NAME (Please print or type)	
CAPACITY OR TITLE Deputy Director, TAES	DATE 2-13-2004	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

INSTRUCTIONS

2004 00 118

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Seed of '962' was first sold for commercial use on August 12, 2003, in the United States by Pickseed West Inc., under rights provided under a license agreement with the Texas Agricultural Experiment Station.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A (Revised)

Origin and Breeding History of "962 Creeping Bentgrass"

'962' Creeping Bentgrass (*Agrostis stolonifera* subsp. *palustris* Huds.) identified and tested as Syn96-2 during the developmental process is a 13 clone polycross of parental lines selected for a combination of traits centered on fine leaf texture and increased turf density and general turf performance for bentgrass putting surfaces in the southern regions of the transition zone for turfgrasses. The parental clones trace to an introduced nursery of 29 variant bentgrass clones with a diverse origin ranging from France to Michigan to Wisconsin, Wisconsin and Texas, and intercrossed in various combinations generating 14 unique multi-clone combinations as determined by plant type, texture color and niching during flowering cycle. Field nursery of over 7800 individuals were planted as maternal line rows and evaluated under cultural conditions similar to a golf course putting green. Of the 14 polycross combinations, individual plants were selected from seven as follows: Four parents were selected from three maternal lines of Population A (an eight [8] clone synthetic), one each from population B (three [3] clone synthetic), C (ten [10] clone synthetic), and I (seven [7] clone synthetic). Two parents were selected from one maternal line of population D (three [3] clone synthetic), two parents were selected from two maternal lines of E (ten [10] clone synthetic) and two parents were selected from one maternal line of L (five [5] clone synthetic). See Tables 1 and 2 for further details on the polycross populations and parental combinations used in the development of '962.'

The progeny populations were subjected to prolonged high temperature/high moisture stress in a soil heat bench screening at Texas A&M Dallas from 1989 to 1990. Approximately 225 individual progeny were selected as survivors of the heat bench screening and transplanted to replicate field trials under putting green conditions involving close mowing and intense cultural practices. Field plots were evaluated specifically for density, texture and color in Texas. Maternal clones were increased and transplanted to a four replicated space plant nursery in Brooks OR in 1996 and allowed to interpollinate in an isolation block. Seed was harvested in 1997 and bulked by maternal clone. Equal quantities of seed from each maternal clone were combined and designated as breeder seed (Generation 1). The breeder seed was used to plant a 5 acre field for seed increase and is designated as experimental Foundation seed and was harvested in 1998 (Generation 2). Less than 5% rouging was imposed prior to pollination to eliminate any undesirable plant types. The foundation (seed stock) class of seed produced in 1998 provided the seed for inclusion in the 1998 NTEP trials. The Foundation class will be used to produce Registered or Certified Class (Generation 3). Production from foundation fields will be limited to 3 years, after which the fields may be downgraded to Certified Class for 4 years. Production from registered fields will be limited to 4 years after which they may be downgraded to Certified for an additional 3 years. Production from Certified production fields will be limited to no more than 7 years from their date of planting with either Registered or Foundation seed stock.

'962' Creeping Bentgrass is a uniform and stable variety. The stability and uniformity as a variety is indicated in the three generations it has been observed from breeder seed to foundation production to certified production. '962' has displayed variants at a frequency of slightly less than 2%. These variants that may be found include plants with a more coarse leaf texture, but are identical to the variety in all other characteristics as described in Exhibit C (Objective Description of Variety). These variants are commercially acceptable and predictable.

Table 1. The specific polycross populations and parental combinations use in their development are identified. Number in red identify specific populations from which parental lines for the Syn96-2 series were selected.¹

Parental Clone	Synthetic Polycross Populations ²														
#	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
2784				108								108			
2794		3						72							
2798		72													
2799		29					72								
2831					108			72				39			92-1
2833			108		108	72									92-5
2845					108	72				108	72				92-5
2852			108	108								108			92-4
2856		108	108		108										
2859				108				72				72		144	92-2
2860							72	72							
2915			108		72	72						108			92-4
2916			108		108	72								60	92-5 92-2 92-4
2922		108	108			72								72	92.5 92.2 92-4
3106	108					72		72	56				72		92-5
3120					108	72							72		
3141			108				72								
3153			108		108	72									92-1 92-4
3165		108					72								
3171		108													
3225		108	108				72				51				92-4
3250	108							72			72				92-1
3271	108								72				72		
3276	108								72				72	72	92-2
3283	108				108			72	72				72		
3285	108							72	72				72		
3293	85	108				72			72				72		92-3 92-5
3307			108		108	72							54		92-1 92-4 92-5
9999	108								72						
#P Clones	8	9	110	3	10	10	5	8	7	1	3	5	8	4	
#progeny	841	752	1080	324	1044	720	360	576	488	108	197	435	558	348	7831

¹This table is a reproduction of Table 4, from the 6th Annual USGA Bentgrass Report-1990, submitted by M. C. Engelke, TAMU, Dallas, TX.

²Individual plants were selected from those populations marked in red which constitutes the parental materials for the Syn96-2.

Table 2. Identity key for individual clones constituting the parentage for 962 creeping bentgrass.

TAES 98 # system	TAES Parental Identity	Polycross Population	Narrative
4292	3285	A	K15-6-11 – Kaeraer collection 1986 France
4293	2859	D	Brook Hollow collection
4294	2859	D	Brook Hollow collection
4295	3307	E	Kaeraer collection 1986 France
4296	2915	L	Fairway #8 Walnut C.C. Michigan
4297	2915	C	Fairway #8 Walnut C.C. Michigan
4298	2856	E	Brook Hollow collection
4299	3106	A	Kevin McVeigh, Brownsville, OR
4300	3285	A	Kaeraer collection 1986 France
4301	2915	L	Fairway #8 Walnut C.C. Michigan
4302	3250	A	Kaeraer collection 1986 France (Century Creeping Bent)
4303	3293	I	Kaeraer collection 1986 France (Imperial Creeping Bent)
4304	2798	B	Brook Hollow #9

Parental Origin by clone:

TAES 3285 – aka TAES 4292 and K15-6-11 from Nimes Campagne G. C. France April 1986
TAES 2859 - aka TAES 4293 collected from Brook Hollow C.C. Dallas Texas July 1984
TAES 2859 - aka TAES 4294 collected from Brook Hollow C.C. Dallas Texas July 1984
TAES 3307 – aka TAES 4295 and U6 collected from Firenze G. C. France, April 1986
TAES 2915 – aka TAES4296 collected from Fairway#8 Walnut CC Michigan July 1984
TAES 2915 – aka TAES4297 collected from Fairway#8 Walnut CC Michigan July 1984
TAES 2856 - aka TAES 4298 collected from Brook Hollow C.C. Dallas Texas July 1984
TAES 3106 – aka TAES 4299 obtained from Kevin McVeigh, Brownsville, OR July 1986
TAES 3285 – aka TAES 4300 and K15-6-11 from Nimes Campagne G. C. France April 1986
TAES 2915 – aka TAES 4301 collected from Fairway#8 Walnut CC Michigan July 1984
TAES 3250 – TAES 4302 and K15-2 from Nimes Campagne G. C. France April 1986 (Century Creeping Bent)
TAES 3293 – aka TAES 4303 and K15-6-29 from Nimes Campagne G. C. France, April 1986 (Imperial CB)
TAES 2798 – aka TAES 4304 collected from Brook Hollow C.C. #9 green Dallas Texas July 1984

Exhibit B (Revised)

Statement of Distinctness of "962 Creeping Bentgrass"

'962' Creeping Bentgrass (*Agrostis stolonifera* subsp. *palustris* Huds.) was developed by the Texas Agricultural Experiment Station. '962' is an improved cool-season turfgrass, having exceptional performance characteristics as a quality turf on golf course greens. The turf selection is dense - fine textured and provides improved cultural performance in the southern transition zones of the United States. '962' is noted for superior leaf texture characters and the ability to maintain a good genetic color during stressful environmental conditions, excellent recuperative ability and adaptability to a wide range of bentgrass growing zones.

'962' is most similar to 'Crenshaw'; however, '962' can be distinguished from 'Crenshaw' by the following characteristics:

1. The lemma color of '962' is silvery whereas 'Crenshaw' is buff.
2. The lemma surface of '962' is glossy and 'Crenshaw' is dull.

'962' resembles 'Penncross' with many morphological traits; however, '962' can be distinguished from 'Penncross' by the following characteristics:

1. '962' was more susceptible to Dollar Spot than 'Penncross' in Kansas and Oklahoma locations, for years 1999 and 2000 (NTEP 00-1, 1999 data Table 26, NTEP 01-2, 2000 data - Table 28).
2. '962' has a finer leaf texture than 'Penncross' in Iowa, Oklahoma, and New Jersey locations, shown in years 2001 and 2002 (NTEP 02-3, 2001 data, Table 9, NTEP 03-5, 2002 data, Table 9).

NTEP 00-1, 1999 data TABLE 26.

DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
1999 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	KS1	MO1	OK1	RI1	RI2	MEAN
PENNCROSS	8.7	7.3	9.0	9.0	7.7	8.3
PENNLINKS	8.3	8.0	9.0	9.0	6.7	8.2
PENN A-1	8.3	8.0	8.7	8.7	7.0	8.1
L-93	8.7	7.7	9.0	8.0	7.0	8.1
SR 7200	6.7	7.3	8.7	9.0	8.7	8.1
PENN G-1	8.3	8.0	9.0	8.7	5.3	7.9
PST-A2E	7.0	8.7	9.0	8.3	6.3	7.9
PENN A-2	8.0	7.0	9.0	8.7	6.3	7.8
BAVARIA	7.7	4.0	9.0	9.0	9.0	7.7
PICK CB 13-94	6.7	8.0	8.7	8.3	7.0	7.7
PICK MVB	6.7	6.3	9.0	9.0	7.0	7.6
PENN G-6	8.0	7.7	9.0	7.7	5.3	7.5
SRX 1BPAA	7.3	7.0	9.0	8.7	4.3	7.3
ISI AP-5	7.0	7.0	8.7	7.3	6.3	7.3
PENN A-4	7.0	7.3	8.3	7.3	5.7	7.1
SR 1119	6.7	7.3	9.0	8.0	4.0	7.0
SRX 1120	6.7	7.7	8.7	8.3	3.7	7.0
BAR AS 8FUS2	7.0	7.3	8.7	6.7	5.0	6.9
ABT-CRB-1	6.3	7.0	8.3	7.7	5.0	6.9
SRX 1NJH	7.0	7.3	8.7	7.7	3.3	6.8
SYN 96-1	5.0	7.3	7.7	7.7	6.0	6.7
IMPERIAL	5.3	6.0	8.0	7.0	6.7	6.6
BACKSPIN	5.7	6.3	8.7	6.3	4.3	6.3
SYN 96-3	4.3	7.3	8.0	6.3	5.3	6.3
SYN 96-2	4.0	7.0	6.0	7.7	6.3	6.2
PROVIDENCE	5.7	7.3	9.0	6.3	2.3	6.1
BAR CB 8US3	4.3	7.0	8.3	4.3	4.0	5.6
CENTURY	5.0	7.0	6.3	5.3	3.0	5.3
CRENSHAW	4.7	6.7	6.7	4.3	3.0	5.1
LSD VALUE	1.0	1.6	0.9	1.7	2.0	0.7
C.V. (%)	9.0	13.8	6.8	13.8	22.3	13.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

Ntep 01-2, 2000 data TABLE 28. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
2000 DATA

NAME	DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/										
	IL1	KS1	ME1	MO1	NJ1	OK1	RI1	RI2	VA1	WI1	MEAN
BAVARIA	7.3	5.0	7.3	7.7	9.0	9.0	8.7	7.7	8.3	9.0	7.9
SR 7200	8.0	4.3	7.7	7.0	9.0	9.0	9.0	6.7	8.7	9.0	7.8
VESPER (PICK MVB)	7.3	4.7	8.0	6.0	8.7	8.7	9.0	5.0	8.3	8.7	7.4
L-93	6.7	6.3	5.7	7.7	8.0	8.7	8.0	5.0	8.0	9.0	7.3
PENN A-2	4.3	5.7	5.3	7.0	8.3	8.0	9.0	5.3	8.7	9.0	7.1
PENNCROSS	3.7	5.0	4.7	7.7	9.0	8.3	9.0	6.0	8.3	8.7	7.0
PST-A2E	4.0	5.3	6.7	7.7	8.0	8.3	8.7	5.0	7.3	9.0	7.0
PENN A-1	5.3	4.7	6.3	7.0	7.3	8.3	9.0	6.0	7.7	8.0	7.0
SRX 1BPAA	3.7	5.7	7.0	7.7	8.3	8.0	8.7	2.3	8.0	9.0	6.8
PENNLINKS	3.0	5.7	4.3	6.7	8.7	8.0	9.0	5.3	8.3	8.7	6.8
PENN G-1	4.7	5.3	6.3	7.7	7.3	8.0	9.0	4.0	8.0	7.3	6.8
SRX 1NJH	4.0	5.0	7.0	8.3	8.0	7.0	8.0	2.0	8.3	9.0	6.7
PENN G-6	4.0	4.0	6.3	7.0	7.7	7.7	8.0	4.3	8.0	8.7	6.6
ISI AP-5	4.0	4.7	5.3	7.7	7.7	7.0	7.3	4.7	8.0	9.0	6.5
PENN A-4	5.0	4.0	6.3	7.0	6.3	7.3	8.0	4.3	7.3	8.7	6.4
PICK CB 13-94	3.7	4.3	4.7	6.3	8.0	7.3	8.3	5.3	7.0	8.7	6.4
BENGAL (BAR AS 8FUS2)	4.0	5.3	7.0	7.7	6.3	7.0	7.0	2.7	6.7	9.0	6.3
BRIGHTON (SRX 1120)	4.7	4.7	7.0	6.3	7.3	7.0	8.3	1.7	6.7	8.0	6.2
ABT-CRB-1	3.0	5.0	6.0	8.0	7.3	6.0	7.3	3.0	6.3	7.3	5.9
IMPERIAL	3.3	3.3	6.3	7.3	5.3	4.7	7.7	5.0	8.0	8.3	5.9
SR 1119	3.7	4.0	5.3	7.0	6.7	7.7	8.0	2.0	7.0	7.7	5.9
SYN 96-1	3.3	3.0	6.0	6.3	6.0	5.7	8.0	4.7	7.0	8.3	5.8
PROVIDENCE	4.7	3.3	6.3	6.7	5.0	6.3	7.0	2.7	6.0	8.0	5.6
SYN 96-2	3.3	2.3	7.0	8.3	4.7	4.7	8.3	5.0	6.7	5.7	5.6
SYN 96-3	3.0	2.7	6.0	7.0	5.7	5.3	7.3	3.0	7.7	8.0	5.6
BACKSPIN	3.3	3.3	6.3	4.7	6.0	7.0	7.0	3.7	6.3	7.0	5.5
BAR CB 8US3	3.7	2.7	3.7	6.7	5.7	6.0	6.7	2.7	6.0	8.0	5.2
CENTURY	3.3	3.0	5.3	6.7	5.3	4.7	7.0	2.0	7.7	6.0	5.1
CRENSHAW	2.3	2.3	7.0	6.0	5.0	4.7	6.7	1.7	7.3	6.7	5.0
LSD VALUE	1.1	1.5	2.1	1.9	1.6	1.0	0.7	0.9	2.3	2.1	0.5
C.V. (%)	16.4	21.0	21.6	16.7	14.3	8.2	5.2	13.1	18.7	16.3	15.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

NTEP 02-3, TABLE 17. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
2001 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	ME1	MO1	NJ1	MEAN
SR 7200	9.0	8.7	8.3	8.7
PENNCROSS	8.7	8.3	8.3	8.4
ISI AP-5	8.7	8.0	8.3	8.3
SRX 1NJH	8.3	8.3	8.0	8.2
PST-A2E	9.0	7.0	8.7	8.2
PENNLINKS	8.3	8.0	8.0	8.1
L-93	8.7	6.7	8.7	8.0
BENGAL (BAR AS 8FUS2)	9.0	8.0	6.7	7.9
PENN A-4	8.0	7.7	8.0	7.9
PENN A-1	8.7	6.7	8.3	7.9
PENN G-6	9.0	7.0	7.3	7.8
ABT-CRB-1	8.0	8.0	7.0	7.7
PENN A-2	8.7	5.3	9.0	7.7
SRX 1BPAA	9.0	7.3	6.3	7.6
BAVARIA	7.0	6.7	8.7	7.4
IMPERIAL	8.3	8.3	5.7	7.4
SYN 96-3	8.3	8.0	5.7	7.3
VESPER (PICK MVB)	8.7	7.3	6.0	7.3
PROVIDENCE	7.0	8.0	6.7	7.2
SR 1119	8.3	6.7	6.7	7.2
PICK CB 13-94	7.7	6.3	7.0	7.0
PENN G-1	7.7	6.7	5.7	6.7
SYN 96-1	8.0	6.0	5.7	6.6
SYN 96-2	8.3	6.7	4.7	6.6
BACKSPIN	7.7	7.0	4.7	6.4
CRENSHAW	7.7	6.0	5.0	6.2
CENTURY	9.0	5.3	4.3	6.2
BAR CB 8US3	8.3	4.7	5.0	6.0
BRIGHTON (SRX 1120)	7.3	4.7	6.0	6.0
LSD VALUE	1.6	3.2	1.9	1.3
C.V. (%)	12.1	28.0	17.0	19.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

NTEP 02-3 2001 data - TABLE 9. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
2001 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	AL1	AZ1	IA1	KS1	ME1	MI1	MT1	NJ1	NY1	OK1	PA1	TX1	MEAN
VESPER (PICK MVB)	8.3	6.5	7.7	7.3	8.7	7.3	7.7	9.0	8.7	9.0	9.0	6.3	8.0
SR 7200	8.3	6.5	7.3	7.7	8.0	7.3	6.7	9.0	7.3	9.0	9.0	6.7	7.7
PENN G-1	7.3	8.3	7.0	8.0	6.0	7.7	6.7	7.7	7.7	7.3	7.0	7.7	7.4
PENN A-1	6.3	8.0	7.3	8.3	5.7	7.7	6.3	7.3	7.3	7.7	7.7	8.0	7.3
SYN 96-3	5.7	6.5	8.0	7.7	6.0	8.0	6.7	7.3	7.3	8.0	7.7	7.3	7.2
BAVARIA	7.7	7.5	5.3	7.0	9.0	7.3	6.3	7.3	6.3	9.0	5.3	7.0	7.1
PST-A2E	6.3	8.0	7.0	7.3	6.3	7.7	6.7	7.3	7.3	7.0	6.7	7.0	7.1
PENN A-4	6.7	8.7	7.7	7.0	6.0	7.7	5.7	6.3	7.7	7.3	6.7	7.3	7.1
SYN 96-2	4.3	7.0	7.7	8.0	6.0	8.0	6.7	6.7	7.0	8.0	8.0	7.3	7.1
SYN 96-1	5.7	6.7	8.0	8.3	6.0	7.0	6.0	6.3	7.3	8.0	7.3	7.3	7.0
PENN A-2	7.3	8.0	7.0	8.0	5.0	8.0	6.7	6.0	7.0	7.0	6.7	7.0	7.0
CENTURY	6.0	6.7	8.0	7.3	5.7	7.0	7.0	6.3	7.3	7.0	6.7	7.3	6.9
BENGAL	6.3	7.3	6.7	7.7	6.0	8.0	5.7	6.7	6.7	7.0	6.7	7.0	6.8
BAR CB 8US3	6.3	7.3	6.3	7.3	6.0	7.7	6.3	5.7	7.0	7.0	6.7	7.0	6.7
ABT-CRB-1	5.0	7.0	7.0	8.0	6.3	7.7	5.7	6.0	7.0	7.0	7.0	7.0	6.7
ISI AP-5	5.3	7.3	6.3	7.7	5.7	7.7	6.3	6.0	7.3	7.0	6.0	7.0	6.6
L-93	5.7	8.0	7.7	6.3	5.3	7.3	6.7	6.0	6.7	7.0	6.0	7.0	6.6
PENN G-6	5.7	7.3	6.3	7.3	5.3	7.7	5.7	6.0	7.0	7.3	7.0	7.0	6.6
IMPERIAL	4.7	7.0	7.3	7.3	5.0	7.3	6.3	6.3	7.3	7.0	6.3	7.0	6.6
SR 1119	5.7	7.3	6.0	7.3	5.3	7.7	6.0	5.7	7.0	7.0	6.0	7.0	6.5
BACKSPIN	4.7	7.7	7.0	6.7	5.7	6.7	6.7	5.3	6.7	7.0	6.7	7.0	6.5
CRENSHAW	4.7	6.7	6.7	6.7	6.0	7.7	6.3	5.3	6.7	7.0	6.0	7.3	6.4
PROVIDENCE	5.3	7.7	6.0	7.0	5.3	7.3	6.0	5.0	6.7	7.0	5.7	7.7	6.4
SRX 1NJH	4.7	6.3	6.3	7.0	5.3	7.3	6.0	6.0	7.3	7.0	5.7	7.3	6.4
SRX 1BPAA	6.0	8.0	5.7	7.0	5.3	7.3	6.3	4.3	6.7	7.0	4.7	6.7	6.3
PICK CB 13-94	6.0	7.0	5.7	7.3	4.7	7.0	5.7	4.7	7.0	7.0	5.7	7.0	6.2
BRIGHTON (SRX1120)	5.0	6.7	6.0	6.7	5.0	7.3	6.0	5.3	7.3	7.0	5.0	7.0	6.2
PENNLINKS	5.0	7.3	5.0	6.3	5.3	7.3	6.3	3.7	6.7	6.3	5.0	6.7	5.9
PENNCROSS	4.3	6.7	5.7	6.3	5.7	7.7	6.3	4.0	6.7	6.3	4.0	6.0	5.8
LSD VALUE	1.3	1.6	0.8	1.1	1.2	0.9	1.5	1.7	1.1	0.4	1.0	0.8	0.3
C.V. (%)	13.3	12.5	7.6	9.0	12.3	7.6	15.2	17.1	9.5	3.6	9.2	6.6	10.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

NTEP 03-5, 2002 data TABLE 9.

LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
2002 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	AL1	AZ1	IA1	MI1	NJ1	NY1	OK1	TX1	MEAN
PENN A-1	7.7	7.7	7.7	8.0	8.3	7.0	7.7	8.0	7.8
PENN G-1	7.7	8.0	7.0	7.7	8.0	7.3	8.0	8.0	7.7
PENN A-4	7.3	8.3	7.3	7.0	8.0	7.0	8.0	8.0	7.6
VESPER (PICK MVB)	8.3	6.3	7.3	7.7	9.0	7.3	7.3	7.3	7.6
IMPERIAL	7.0	7.7	7.3	7.7	7.0	7.3	7.7	8.0	7.5
SR 7200	8.7	6.3	7.3	7.0	9.0	7.0	7.3	7.0	7.5
PENN A-2	7.7	7.3	7.0	7.7	7.0	7.0	7.7	8.0	7.4
SYN 96-1	6.3	7.7	8.0	7.0	7.3	7.3	8.0	7.7	7.4
SYN 96-3	6.7	6.7	7.3	8.0	7.7	7.0	7.7	7.7	7.3
PST-A2E	7.7	7.3	7.0	7.3	7.0	6.7	7.7	8.0	7.3
ABT-CRB-1	8.3	6.3	7.0	7.3	7.3	7.0	7.3	7.7	7.3
SYN 96-2	6.0	7.0	7.3	7.7	7.7	7.0	8.0	7.3	7.3
ISI AP-5	6.3	7.3	6.7	7.3	7.3	7.0	7.7	7.7	7.2
BAVARIA	8.3	6.3	6.3	7.3	.	6.7	8.0	7.0	7.1
PENN G-6	7.3	6.3	7.3	7.7	5.7	7.0	7.3	8.0	7.1
BENGAL (BAR AS 8FUS2)	7.0	7.7	7.7	7.0	5.3	7.0	7.3	7.3	7.0
BAR CB 8US3	7.0	7.0	6.7	7.0	6.0	8.0	7.0	7.3	7.0
CENTURY	7.0	7.0	7.0	7.3	6.7	7.0	7.0	7.0	7.0
SR 1119	6.3	7.0	7.0	8.0	6.0	7.0	7.0	7.0	6.9
PROVIDENCE	6.7	7.3	6.0	7.7	4.7	7.3	7.3	7.3	6.8
CRENSHAW	6.0	7.0	7.7	7.7	4.7	7.3	7.0	7.0	6.8
L-93	6.0	7.3	6.7	7.3	5.3	7.0	7.3	7.3	6.8
SRX 1BPAA	6.3	7.3	6.3	7.7	4.7	6.7	7.0	7.3	6.7
SRX 1NJH	6.0	6.0	6.7	7.7	6.0	6.3	7.0	7.7	6.7
BRIGHTON (SRX 1120)	6.3	6.7	6.3	7.3	5.0	7.0	7.7	7.0	6.7
BACKSPIN	6.7	6.7	6.7	7.3	4.3	7.0	7.0	7.3	6.6
PICK CB 13-94	6.0	7.0	6.0	7.3	4.0	7.0	7.3	7.7	6.5
PENNCROSS	5.3	6.3	5.3	7.7	3.0	6.7	7.0	7.3	6.1
PENNLINKS	6.3	6.3	5.3	7.3	2.3	6.7	6.3	7.0	6.0
LSD VALUE	1.4	1.0	1.0	0.9	1.5	0.8	0.8	0.7	0.4
C.V. (%)	12.8	9.2	8.8	7.9	14.6	7.5	6.3	5.5	9.2

1/TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.

STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C
(BENTGRASS)

OBJECTIVE DESCRIPTION OF VARIETY
BENTGRASS
(*Agrostis* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
M.C. Engelke/Texas Agricultural Experiment Station	Pick Syn 96-2 on Syn 962	962

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY
Texas A & M Research & Extension Center 17360 Coit Road Dallas, TX 75252-6499	PVPO NUMBER

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Descriptions of characters should represent those that are typical for the variety. Ranges may be given also. Measured data should be for SPACED PLANTS. Give additional description for all characteristics that cannot be adequately described in the form below. Append all pertinent comparative trial and evaluation data. The symbol "▲" indicates decimal.

COMPARISON VARIETIES FOR USE BELOW

- | | | | |
|---------------|---------------|--------------|----------------------------------|
| 1 = Astoria | 2 = Exeter | 3 = Highland | 4 = Seaside |
| 5 = Penncross | 6 = Kingstown | 7 = Astra | 8 = Other (Please Specify): Cato |
| | | | 9 = Crenshaw |

1. SPECIES

- | | |
|--|---|
| <input checked="" type="checkbox"/> 1 = Colonial (browntop) <i>A. tenuis</i> | <input type="checkbox"/> 2 = Creeping <i>A. stolonifera</i> (<i>A. palustris</i>) |
| <input type="checkbox"/> 3 = Velvet <i>A. canina</i> ssp. <i>canina</i> | <input type="checkbox"/> 4 = Brown Bent <i>A. canina</i> ssp. <i>montana</i> |
| <input type="checkbox"/> 5 = Red Top <i>A. gigantea</i> | |

2. ADAPTATION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted)

- | | | | |
|--|---|---|---|
| <input checked="" type="checkbox"/> Northeast | <input checked="" type="checkbox"/> Southeast | <input checked="" type="checkbox"/> North Central | <input checked="" type="checkbox"/> Pacific N. W. |
| <input type="checkbox"/> 0 Other (Please Specify): | | | |

3. MATURITY (At first anthesis): Use comparison varieties

- | | |
|--|--|
| <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 2 Days earlier than | <input checked="" type="checkbox"/> 5 COMPARISON VARIETY |
| Maturity the same as | <input checked="" type="checkbox"/> 8 COMPARISON VARIETY |
| <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 4 Days later than | <input checked="" type="checkbox"/> 9 COMPARISON VARIETY |

4. HEIGHT (Average of longest 10 shoots from soil surface to top of head)

- | | | |
|--|---|--|
| <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 4 <input checked="" type="checkbox"/> 6 cm Height (at maturity) | <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 cm Shorter than | <input checked="" type="checkbox"/> 5 COMPARISON VARIETY |
| | Height the same as | <input checked="" type="checkbox"/> 9 COMPARISON VARIETY |
| | <input type="checkbox"/> cm Taller than | <input type="checkbox"/> COMPARISON VARIETY |

0 0 2 % Prostrate 0 0 0 Decumbent 0 9 8 % Geniculate 1 0 0 % Erect

6. VEGETATIVE REPRODUCTION

Rhizomes: 1 1 = Absent 2 = Present

Stolons: 2 1 = Absent 2 = Present

0 0 0 % Rhizomes 1 0 0 % Stolons

7. LEAF BLADE

Color: 3 1 = Yellowish Green (Cohansey) 2 = Light Green (Washington)
3 = Green (Exeter) 4 = Dark Green (Kingstown, Tracenta)
5 = Bluish Green (Highland) 6 = Other (Please Specify):

Texture: (fineness) 2 1 = Very Fine (Kingstown) 2 = Fine (Exeter)
3 = Medium Fine (Astoria) 4 = Medium (Seaside)
5 = Medium Coarse (Virginia) 6 = Coarse (Vermont)

Stomatal density of upper leaf surface

Lower Surface: 1 0 0 % Smooth 0 0 0 % Rough

Upper Surface: 0 0 0 % Smooth 1 0 0 % Rough

Margins: 0 0 0 % Smooth 1 0 0 % Rough

2 5 mm Width (Average of 10) 0 7 mm Narrower than 4 COMPARISON VARIETY
(2.5mm) vegetative leaf Width same as 9 COMPARISON VARIETY

0 0 mm Wider than 0 COMPARISON VARIETY

2 4 mm Width (Flag Leaves) 4 2 cm Length (Flag Leaves)

8. LEAF SHEATH

Anthocyanin: 2 1 = Absent 0 5 0 % Red Sheaths
2 = Present

9. LIGULE (lower and middle leaves)

Shape at Apex: 0 4 0 % Acute 0 6 0 % Rounded 0 0 0 % Truncate
0 0 0 % Other (Please Specify):

Pubescence: 1 0 0 % Glabrous 0 0 0 % Pubescent

Margins: 0 1 0 % Entire 0 9 0 % Toothed

0 0 0 % Other (Please Specify):

0 0 mm Length
1.58mm

10. LEMMA

Shape: 0 9 3 % Lanceolate 0 0 7 % Ovate

10. LEMMA (Connuea)

% O

% Other (Please Spec)

4 mm Width

mm Length (Exclusive of awn)
1.47mm

Color: 7 % Buff

9 3 % Silvery

% Other (Please Specify):

Surface: 9 8 % Glossy

2 % Dull

Texture: 1 0 0 % Smooth

% Punctate

Pubescence: 1 0 0 % Glabrous

% Sparse

% Copious

Basal Hairs: 1 0 0 % Absent

% Few

0 % Many

% Short

0 % Long

% Appressed

0 % Ascending

% Spreading

Awns: 1 0 0 % Absent

0 % Few

0 % Many

0 % Awn-pointed

0 % Short

0 % Long

0 % Straight

0 % Geniculate

Awn Insertion on Lemma: 0 % Basal

0 % Middle

0 % Distal

11. PANICLE

Type (in anthesis): 0 9 1 % Open

0 0 9 % Compact

Anthocyanin: 3 7 % Absent

6 3 % Present

Branches in Anthesis: 0 0 8 % Appressed

0 9 2 % Ascending

0 0 0 % Spreading

Branches in Fruit: 0 4 0 % Appressed

0 6 0 % Ascending

0 0 0 % Spreading

Branch Surface: 0 0 9 % Smooth

0 9 1 % Rough

Panicle length: 8.6 cm

12. SEED

1 4 Grams per 1000 seed

13. SPRING GREEN UP

2 1 = Early (Exeter) 2 = Medium (Astoria) 3 = Late (Kingstown)

☒ Cold ☐ Heat ☒ Drought ☐ Shade ☐ Other (Please Specify): _____

15. DISEASE RESISTANCE

(0 = Not Tested, 1 = Susceptible, 2 = Resistant)

- | | |
|---|---|
| <input type="checkbox"/> Red Leaf Spot (<i>Drechslera erythrospila</i>) | <input type="checkbox"/> Helminthosporium Leaf Spot (<i>Bipolaris sorokiniana</i>) |
| <input type="checkbox"/> Melting Out (<i>Drechslera poae</i> (<i>Helminthosporium vagans</i>)) | <input checked="" type="checkbox"/> Dollar Spot (<i>Sclerotinia homoeocarpa</i>) |
| <input type="checkbox"/> Pythium Blight (<i>P. aphanidermatum</i>) | <input type="checkbox"/> Pythium Blight (<i>P. ultimum</i>) |
| <input type="checkbox"/> Fusarium Blight (<i>F. roseum</i>) | <input type="checkbox"/> Fusarium Blight (<i>F. tricinctum</i>) |
| <input checked="" type="checkbox"/> Fusarium Patch (Pink Snow Mold) (<i>F. nivale</i>) | <input type="checkbox"/> Powdery Mildew (<i>Erysiphe graminis</i>) |
| <input checked="" type="checkbox"/> Ophiobolus Patch (<i>O. graminis</i>) | <input type="checkbox"/> Stripe Smut (<i>Ustilago striiformis</i>) |
| <input type="checkbox"/> Copper Spot (<i>Gloeocercospora sorghi</i>) | <input checked="" type="checkbox"/> Typhula Blight (Snow Scald) (<i>T. incarnata</i>) |
| <input type="checkbox"/> Red Thread (<i>Corticium fuciforme</i>) | <input checked="" type="checkbox"/> Brown Patch (<i>Rhizoctonia solani</i>) |
| <input type="checkbox"/> Stem Rust (<i>Puccinia graminis</i>) | <input type="checkbox"/> Crown Rust (<i>P. coronata</i>) |
| <input type="checkbox"/> Leaf Rust (<i>P. poae-nemoralis</i>) | <input type="checkbox"/> Other (Please Specify): _____ |

16. INSECT RESISTANCE

(0 = Not Tested, 1 = Susceptible, 2 = Resistant)

- | | |
|--|--|
| <input type="checkbox"/> European Chafer (<i>Amphimallon solstitialis</i>) | <input type="checkbox"/> Garden Chafer (<i>Phyllopertha horticola</i>) |
| <input type="checkbox"/> Chinch Bug (<i>Blissus insularis</i>) | <input type="checkbox"/> Webworm (<i>Crambus</i> spp.) |
| <input type="checkbox"/> Armyworm (Cutworm) (<i>Pseudaletia unipuncta</i>) | <input type="checkbox"/> Other (Please Specify): _____ |

17. GIVE VARIETY(S) THAT MOST CLOSELY RESEMBLE THE SUBMITTED VARIETY: For the following characteristics indicate the degree of resemblance (D.R.) with one of the following numbers: 1 = submitted variety is less than, lighter, or inferior to similar variety, 2 = Same as, 3 = More than, darker or superior, etc.

Character	Similar Variety	D.R.	Character	Similar Variety	D.R.
Growth Habit	Crenshaw	2	Leaf Color	Crenshaw	2
Awn Length			Panicle Type	Crenshaw	2
Seed Weight			Turf Fineness	Crenshaw	2
Cold Resistance	Penncross	2	Heat Resistance	not tested	0
Drought Resistance	Penncross	2	Shade Resistance	not tested	0
Brown Patch	Crenshaw	2	Panicle length	Seaside	1

18. COMMENTS

Morphological characters measured from a spaced planted trial of individuals/cultivars in the 2000 growing season. Trial was located at Pickseed West, Inc. research facility, Albany, OR. Physiological traits were scored from NTEP no. 01-2, National Bentgrass Test - 1998, Putting Green.

Exhibit D**Additional Description of "962 Creeping Bentgrass"**

'962' has been noted for its ability to maintain a good genetic color during stressful environmental conditions. 962 was included in the 1998 NTEP trials which were planted in the fall of 1998 in replicated trials at 24 locations and under various management regimes. Data taken from the 1998 National Bentgrass (Putting Green) Test Final Report NTEP No. 03-8 (Table 7 attached) showed that 962 had darker green genetic color than 'Crenshaw', although not statistically different. Below is a picture of 962 taken February 19 2003 at Garland, Texas.



TABLE 7.
GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS
GROWN ON A GREEN 1/
1999-2002 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/															
	AL1	AZ1	IA1	IL1	KS1	KY1	KY2	MA1	ME1	MI1	MO1	MT1	NC1	NE1	NJ1	NY1
	OK1	PA1	RI1	RI2	SC2	TX1	UT1	VA1	WA3	WA4	WI1	WI2	MEAN			
PENN A-2	6.6	7.0	6.7	6.0	6.7	8.7	8.0	7.7	7.1	6.3	6.6	6.9	7.0	7.8	6.8	7.0
SYN 96-2	6.8	6.5	7.4	5.8	6.3	7.9	7.4	6.3	7.2	6.5	5.9	7.3	6.3	7.7	7.2	7.0
L-93	6.8	5.9	6.9	6.1	7.0	8.0	8.0	8.0	7.3	6.3	6.8	7.1	6.7	8.0	6.3	7.3
PST-A2E	7.0	6.3	6.8	6.0	6.7	8.0	7.7	5.7	6.8	6.3	6.1	6.8	8.0	7.4	7.0	6.7
SRX 1NUH	6.9	6.3	6.5	6.1	6.3	8.3	7.9	5.0	7.6	6.7	6.2	6.6	7.0	8.0	6.3	7.0
PENN G-1	6.6	6.2	6.9	5.5	6.7	8.3	7.8	8.0	7.3	6.0	6.7	6.9	7.3	7.6	7.4	7.0
PENN A-4	6.8	6.7	6.8	5.6	6.3	8.4	7.9	7.3	7.3	6.0	5.9	6.9	7.3	7.4	6.3	7.0
SRX 1BPAA	7.5	6.7	6.3	5.9	5.7	7.3	7.1	5.7	7.8	6.0	6.4	7.1	7.0	8.0	5.6	7.0
BRIGHTON (SRX 1120)	7.0	5.8	6.4	6.1	6.7	7.7	7.6	7.3	7.4	6.6	6.8	6.9	6.3	7.7	5.9	7.0
SR 1119	6.6	6.3	6.6	6.1	7.0	7.8	7.3	7.3	7.3	6.0	6.6	6.9	6.7	7.9	6.4	7.0
ISI AP-5	6.5	6.3	6.5	6.1	6.7	7.5	7.0	8.3	7.8	6.1	6.2	6.6	7.0	7.6	5.8	6.7
PENN A-1	6.0	6.0	6.8	5.9	7.3	7.8	7.6	7.3	6.8	6.0	6.2	6.7	7.0	7.7	8.1	6.7
BAR CB 8US3	6.4	6.8	6.5	6.6	6.3	7.4	7.0	7.3	7.1	6.3	6.8	7.1	6.7	7.9	5.8	6.7
CRENSHAW	7.0	6.3	7.1	5.8	5.7	7.3	6.9	7.3	7.3	5.8	6.3	7.0	7.7	8.1	6.2	6.7
PENN G-6	5.8	6.0	6.6	5.6	6.7	8.0	7.0	7.7	7.3	6.2	6.0	5.9	6.3	7.9	7.1	7.0
ABT-CRB-1	6.3	6.3	7.0	5.8	6.0	6.9	6.8	5.7	7.0	6.4	5.9	7.1	6.3	7.7	6.7	7.2
PICK CB 13-94	6.5	6.5	6.4	5.8	6.0	6.8	6.3	6.7	7.3	6.4	6.1	6.9	6.3	7.9	5.2	7.0
BENGAL (BAR AS 8FUS2)	6.2	5.5	7.1	5.4	6.3	6.8	6.3	6.3	7.1	6.6	6.4	6.7	7.0	7.7	6.2	7.0
PROVIDENCE	6.3	5.8	6.5	6.0	6.0	7.0	7.0	8.0	7.0	6.0	6.2	6.1	6.7	7.8	6.2	6.7
VESPER (PICK MVP)	6.3	5.3	6.7	5.3	6.3	4.4	5.0	6.0	8.0	6.3	5.3	6.8	6.7	5.0	7.4	6.3
SYN 96-3	5.8	5.8	7.1	5.3	6.7	6.3	6.0	5.7	7.1	6.2	5.9	6.6	6.0	7.3	7.6	6.3
CENTURY	6.1	5.5	6.8	5.4	5.3	7.0	6.8	8.0	7.3	5.8	6.2	7.0	6.0	7.2	5.1	6.3
IMPERIAL	5.5	5.6	7.0	5.3	6.7	7.2	7.1	7.3	6.8	5.7	5.8	6.4	6.7	7.0	6.2	6.7
SYN 96-1	5.3	5.8	7.3	5.3	5.7	6.7	6.1	7.3	7.0	6.1	5.7	6.7	6.3	6.9	5.6	6.7
SR 7200	6.3	5.0	6.3	4.7	6.7	4.1	4.6	7.7	7.8	6.5	4.8	6.7	7.0	4.0	7.2	6.7
BACKSPIN	5.5	5.4	6.6	5.4	6.3	6.3	6.2	7.3	6.8	5.7	5.9	6.7	7.0	7.1	5.1	6.7
PENNCROSS	5.3	5.5	6.0	4.9	6.0	5.8	5.8	7.7	7.3	6.1	5.9	5.9	5.7	7.2	3.8	7.0
PENNLINKS	6.1	5.3	6.2	4.8	5.7	6.2	5.8	8.3	7.2	5.8	6.0	6.3	6.7	7.4	3.8	6.0
BAVARIA	4.8	5.0	5.8	5.3	6.3	4.1	4.6	7.0	6.0	6.6	5.8	5.0	6.3	5.0	2.5	5.0
LSO VALUE	1.2	0.8	1.0	1.1	1.3	1.2	1.5	1.4	1.1	0.7	1.3	1.4	0.9	1.4	2.2	0.8
C.V. (%)	11.6	7.9	9.8	13.0	12.6	11.0	13.9	12.5	9.6	6.7	13.8	13.4	8.4	12.2	22.4	7.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

Source: 1998 National Bentgrass (Putting Green) Test Final Report NTEP No. 03-8.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) Texas Agricultural Experiment Station	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER Syn 96-2, Pick Syn 96-2, 96-2	3. VARIETY NAME 962
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) Office of the Director, Texas Agricultural Experiment Station 2147 TAMU College Station, TX 77843-2147	5. TELEPHONE (Include area code) (979) 845-4747	6. FAX (Include area code) (979) 458-4765
7. PVPO NUMBER 2004 00 1 18		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

The original breeder of this variety, Dr. Milton C. Engelke, is an employee of the Texas Agricultural Experiment Station (TAES), and he developed this variety in the course of his duties at TAES. TAES policy and handbook manual provide that all germplasm and varieties developed by its employees in the course of their duties are owned by TAES. A copy of this policy is provided for your records.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

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